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**What is claimed is:**

1. . Message analyser for analysing messages which are  
transmitted via service access points (8.1, 8.2,  
8.3, 9.1, 9.2, 7.1, 7.2, 7.3) from layers (1, 2, 3,  
10 4, 5) of an OSI reference model of an end system of  
a subscriber of a mobile telephone system, the  
message analyser (10) comprising  
  
a storage device (13) for storing messages,  
  
a selector (14) for reading in a sequence of  
15 temporally successive messages  
  
and a display device (15) for displaying at least  
one first region (16) and one second region (17),  
  
a sequence of messages, which is read in by means  
of the selector (14) from the storage device (13),  
20 being able to be displayed listed in the first  
region (16),

**characterised in that**

the selector (14) determines, for at least one  
service access point (7.1, 7.2, 7.3, 8.1, 8.2, 8.3,  
25 9.1, 9.2), a characteristic feature of the messages  
which are transmitted via this service access point  
(7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) and the  
course (26) of this characteristic feature can be  
displayed on the display device (15) in the second  
30 region (17).

2. Message analyser according to claim 1,

5        **characterised in that**

the selector (14) determines a characteristic feature for messages which are transmitted via a plurality of service access points (7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) of a layer of the OSI reference model, and the course (26) of this characteristic feature can be displayed on the display device (15) in the second region (17) of the display device (15).

3.    Message analyser according to claim 1 or 2,

15       **characterised in that**

the sequence of messages which is read in by means of the selector (14) is dependent upon a selection with which a specific point (32) of the course (26) of the characteristic feature can be selected in the second region (17).

4.    Message analyser according to claim 3,

**characterised in that**

at least one specific point can be marked by a marking (33.1, 33.2, 33.3, 33.4) in the course (26) displayed in the second region (17) and, upon selection of the marking (33.1, 33.2, 33.3, 33.4), a sequence of messages which corresponds to the specific point is read in from the storage device (13).

30    5.    Message analyser according to claim 3 or 4,

**characterised in that**

5       on the basis of the additional items of information  
stored during storage of messages in the storage  
device (13), markings (34.1, 34.2) can be produced  
automatically by means of the selector (14).

6.     Message analyser according to one of the claims 1 to  
10     5,

**characterised in that**

the course (26) of the characteristic feature can  
be displayed in the second region (17) in a  
coordinate system, the X axis (28) of which is a  
15     time axis.

7.     Message analyser according to claim 6,

**characterised in that**

the region of the course (26) displayed in the  
second region, which corresponds respectively to  
20     the sequence of messages currently displayed in the  
first region (16), is highlighted.

8.     Message analyser according to one of the claims 1 to  
5,

**characterised in that**

25     the course of the characteristic feature can be  
displayed in the second region (17) in a coordinate  
system, the X axis (28) of which is subdivided into  
intervals with an identical number of messages.

9.     Message analyser according to one of the claims 1 to  
30     8,

5        **characterised in that**

the characteristic feature is a number of  
transmitted messages per interval of time and/or a  
data load of a layer (1, 2, 3, 4, 5) of the OSI  
reference model and/or a number of messages  
10       transmitted repeatedly.

10. Method for analysing messages which are transmitted  
via service access points (7.1, 7.2, 7.3, 8.1, 8.2,  
8.3, 9.1, 9.2) from layers (1, 2, 3, 4, 5) of an OSI  
reference model of an end system of a subscriber of  
15       a mobile telephone system and which are stored in a  
storage device (13), with the following method steps  
using a computer or a digital signal processor:

- reading in a sequence of messages by means of a  
         selector (14) and
- 20       -       display of the sequence of messages, which is  
         read in by means of the selector (14), in  
         tabular form in a first region (16) of a  
         display device (15),

**characterised in that**

25       a characteristic feature of messages which are  
transmitted via at least one service access point  
(7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) is  
determined by means of the selector (14)

and a course of the characteristic feature is  
30       displayed in a second region (17) of a display  
device (15).

11. Method according to claim 10,

5       **characterised in that**

a characteristic feature of messages which are transmitted via a plurality of service access points (7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) of a layer (1, 2, 3, 4, 5) of an OSI reference model is  
10       determined by means of the selector (14).

12. Method according to claim 10 or 11,

**characterised in that,**

in the second region (17), a specific point (32) of the course (26) of the characteristic feature is  
15       selected and

in that a sequence of messages dependent upon the specific point (32) is read in by the selector (14).

13. Method according to one of the claims 10 to 12,

**characterised in that,**

20       in the second region (17), at least one specific point of the course (26) of the characteristic feature is marked by means of at least one marking (33.1, 33.2, 33.3, 33.4) and

upon selection of the marking (33.1, 33.2, 33.3, 33.4), dependent upon the specific point marked by  
25       the marking (33.1, 33.2, 33.3, 33.4), a corresponding sequence of messages is read in by means of the selector (14) from the storage device (13).

30   14. Method according to claim 13,

**characterised in that,**

5           during storage of the messages in the storage device  
          (13), additional items of information are stored and  
  
          dependent upon these additional items of  
          information, markings (34.1, 34.2) are produced  
          automatically in the second region (17) by means of  
10          the selector (14).

15. Method according to one of the claims 10 to 14,

**characterised in that**

          at least one characteristic feature is displayed in  
          the second region (17) in a coordinate system, the X  
15          axis (28) of which is a time axis.

16. Method according to claim 15,

**characterised in that**

          the region which corresponds respectively to the  
          sequence of messages displayed in tabular form in  
20          the first region (16) is displayed highlighted in  
          the second region (17).

17. Method according to one of the claims 10 to 14,

**characterised in that**

          the at least one characteristic feature is displayed  
25          in the second region (17) in a coordinate system,  
          the X axis (18) of which is sub-divided into  
          intervals with an identical number of messages.